



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,754	10/29/2003	Shenshen Wu	20002.0263A	5757
23517	7590	04/15/2005	EXAMINER	
SWIDLER BERLIN LLP			BUTTNER, DAVID J	
3000 K STREET, NW			ART UNIT	
BOX 1P			PAPER NUMBER	
WASHINGTON, DC 20007			1712	

DATE MAILED: 04/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,754

Applicant(s)

WU ET AL.

Examiner

David Buttner

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

The status of the parent applications must be updated at the beginning of the specification.

The lined out references on the 1449 form could not be located in the parent applications.

There is not support for "casted" covers or the specific urethanes of claims 12-21 in 9-461736. These claims have an effective filing date of 11/27/00. Application 9-311591 does not support the MW's now claimed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

There is no antecedent basis for "the polyol".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section

Art Unit: 1712

351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-6 and 8 rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Moriyama '396.

Moriyama exemplifies golf balls (table 1) having a core of BR-11(a high cis polybutadiene), zinc acrylate crosslinker, peroxide initiator and diphenyldisulfide. Diphenyldisulfide is one of applicant's preferred cis-to-trans catalysts (claim 19). Inherently BR-11 has a high MW (see Endo 6489401's description in table 2). The cover can be polyurethane (col 3 line 62). Use of a urethane cover on the exemplified core would at least be obvious, if not considered anticipated.

Claims 12-14 and 16 rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama '396 in view of Higuchi '888.

Moriyama does not give any details regarding the polyurethane.

Higuchi teaches desirable polyurethane covers can be made from MDI or H12MDI (col 4 line 6-10) and polyetherpolyols (col 4 line 3).

It would have been obvious to use any known urethane cover on Moriyama's ball for the expected results.

Claims 1-6,8,12,13 and 16-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '293 in view of Moriyama '856.

Sullivan exemplifies (table 9) golf balls having a core, a mantle and a casted urethane cover of Baytec RE832. Baytec RE832 is made from diphenylmethane diisocyanate and a polyetherpolyol (col 14 line 6). The core is made of BR-1220 (a high cis polybutadiene), zinc diacrylate crosslinker, peroxide etc. (col 16 line 18-28).

Inherently, BR-1220 has a high MW (see Nesbitt 6277920's description in table 2). Sullivan does not suggest the inclusion of organosulfur compounds such as diphenyldisulfide in his core.

It is known that inclusion of such organosulfur compounds improve golf ball cores (see Moriyama col 2 line 47-64). It would have been obvious to include such organosulfurs in Sullivan's core for the expected advantages. Note that Moriyama's "organophosphorous" is a misprint as the subsequently named species are sulfides.

Claims 12-21 rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan '293 in view of Moriyama '856 and Peter '313.

The Sullivan/Moriyama combination is not limited to any particular polyurethane although only one particular species is named.

Peter describes a variety of polyurethane covers, including those based on MDI (col 7 line 8) and H12MDI (col 16 line 17). Furthermore, Peter explains the free diisocyanate should be kept low (col 8 line 51). Peter's urethane cover has good resilience and shear resistance.

It would have been obvious to any of Peter's covers on the Sullivan ball for the expected advantages.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

Art Unit: 1712

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-21 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-50 of U.S. Patent No. 6486261. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf balls having a urethane cover and a core of high MW polybutadiene, free radical source and cis-to-trans catalyst. The claims of the patent do not call for a crosslinker, but it is well known in the art that crosslinkers (eg zinc acrylate) are normally necessary to cure polybutadiene golf ball cores. The examples of the patent indicate the presence of crosslinker is intended to be embraced by the claims.

Claims 1-21 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-22 of U.S. Patent No. 6818705. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims golf balls having a urethane cover and a core of high MW polybutadiene and cis-to-trans catalyst. The claims of the patent do not call for a free radical source and crosslinker, but it is well known in the art that peroxides and crosslinkers (eg zinc acrylate) are normally necessary to cure polybutadiene golf ball cores. The examples of the patent indicate the presence of peroxides and crosslinker is intended to be embraced by the claims.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-17 of copending Application No. 10-694746. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball additionally requiring a certain loss tangent. The instant claims are broader in the sense that any loss tangent is permitted. Additionally, it is clear from the instant specification that loss tangent is an inherent property of the claimed core.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10-694800. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball additionally requiring a certain dynamic stiffness. The instant claims are broader in the sense that any dynamic stiffness is permitted. Additionally, it is clear from the instant specification that dynamic stiffness is an inherent property of the claimed core.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of

copending Application No. 10-694798. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball additionally requiring a certain trans isomer gradient through the core. The instant claims are broader in the sense that any trans profile is permitted. Additionally, it is clear from the instant specification that the trans gradient is an inherent property of the claimed core.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-21 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-21 of copending Application No. 10-694801. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims essentially the same ball additionally requiring a certain resilience index. The instant claims are broader in the sense that any resilience index is permitted. Additionally, it is clear from the instant specification that resilience is an inherent property of the claimed core.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

Art Unit: 1712

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

4/5/05

DAVID J. BUTTNER
PRIMARY EXAMINER

